



March 21, 2014

To: Executive Board

Subject: **Foothill Transit Arcadia Facility Service and Maintenance Review**

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### **Recommendation**

Receive and file a report on on-street service and fleet and facility maintenance at Foothill Transit's Arcadia Operations and Maintenance facility.

### **Background**

In February 2013, the Executive Board received a Service and Maintenance Review on both Foothill Transit facilities operated by First Transit, as well as an action plan developed with First Transit to address service quality issues.

Beginning in August 2013, the Executive Board received and filed monthly reports on Foothill Transit's bus service and fleet and facility maintenance operated by First Transit Arcadia. Of particular concern were increases in missed service due to operator and vehicle shortages. The most frequent occurrence of this missed service took place in July 2013. Decreased customer satisfaction with service provided by First Transit Arcadia was also evidenced by an increase in customer complaints submitted and presented during public comment at meetings of the Executive Board.

Foothill Transit's Arcadia facility operates 15 lines, including the Silver Streak, Line 187, and Line 690, utilizing 146 compressed natural gas (CNG) buses. First Transit provides these services through the employment of 395 coach operators, dispatchers, technicians and administrative personnel.

As outlined in the contract, the operations and maintenance contractors:

“...shall coordinate, manage, and control all activities necessary to perform Work and carry out its responsibilities under this Agreement, which include, but are not limited to, the following: maintaining all Revenue Vehicles and Non-Revenue Vehicles; providing Non-Revenue Vehicles for support and relief; providing operators, mechanics and all other project personnel, training personnel as necessary; developing administrative procedures and financial records; providing security for the Revenue and Non-Revenue Vehicles and the Facility; and developing methods to improve effectiveness and maximize service efficiency.”



## **Analysis**

The sections below provide additional information on First Transit's performance at the Arcadia Operations and Maintenance Facility.

On November 12, 2013 staff issued a letter to First Transit Arcadia stipulating a graduated timeline of performance standards in the areas of missed service, miles between service interruptions and on-time performance for December 2013, January 2014, and February 2014. Of the three standards set for February 2014, First Transit Arcadia met one:

<b>First Transit Arcadia</b>	
<b>February 2014 Performance Standards</b>	<b>Met?</b>
Fewer than 3 trips missed in any rolling three-day period	No
Minimum of 15,000 miles between mechanical service interruptions	Yes
85% average monthly on-time performance on all lines operated	No

Note that in January 2014 and December 2013, the contractor met two out of the three graduated standards:

<b>First Transit Arcadia</b>	
<b>January 2014 Performance Standards</b>	<b>Met?</b>
Fewer than 6 trips missed in any rolling three-day period	No
Minimum of 12,500 miles between mechanical service interruptions	Yes
80% average monthly on-time performance on all lines operated	Yes

<b>First Transit Arcadia</b>	
<b>December 2013 Performance Standards</b>	<b>Met?</b>
Fewer than 10 trips missed in any rolling three-day period	No
Minimum of 10,000 miles between mechanical service interruptions	Yes
75% average monthly on-time performance on all lines operated	Yes

## **Safety**

Safety is Foothill Transit's primary goal. To measure the effectiveness of our safety initiatives, we have established a performance target of 0.60 preventable accidents per 100,000 miles for FY 2014. Preventable accidents are defined as: 1) accidents caused by a worker's failure to do everything that he or she could reasonably be expected to do to prevent the accident, or 2) accidents caused by the vehicle operator's failure to react reasonably to the error of others. The chart below reports the 12-month performance of First Transit Arcadia in comparison to system-wide performance.



Month	Arcadia Performance	System Performance
March 2013	0.52	0.61
April 2013	0.52	0.61
May 2013	0.68	0.60
June 2013	0.54	0.54
July 2013	1.02	0.68
August 2013	0.51	0.42
September 2013	0.54	0.45
October 2013	0.50	0.50
November 2013	0.54	0.54
December 2013	0.51	0.44
January 2014	1.34	0.84
February 2014	0.38	0.28
<b>12-Month Average</b>	<b>0.63</b>	<b>0.54</b>

First Transit Arcadia reported two preventable accidents in February, averaging 0.38 preventable accidents per 100,000 miles. This is the lowest number of accidents First Transit Arcadia has averaged in the last year and meets the performance target. Due to the high number of preventable accidents experienced at the Arcadia facility last month, however, their 12-month safety performance does not meet the performance target.

### **Service Delivery**

Missed service is monitored as an indicator of the quality of service provided to Foothill Transit customers. To measure progress towards reducing missed service, staff established the following performance standards in November 2013 for First Transit Arcadia:

Missed Service Performance Standard	Target Date	Met?
Fewer than 10 trips missed in any rolling three-day period	December 31, 2013	No
Fewer than 6 trips missed in any rolling three-day period	January 31, 2014	No
Fewer than 3 trips missed in any rolling three-day period	February 28, 2014	No

For the purposes of this benchmark, a trip is considered missed if more than half of the scheduled miles were missed. In February 2014, First Transit Arcadia did not meet the performance standard, missing three or more trips in 22 rolling three-day periods. In February, they also did not meet the standards previously set for December and January, missing 10 or more trips in five rolling three-day periods, and six or more trips in eight rolling three-day periods.



Month	Number of rolling three-day periods with		
	≥ 10 missed trips	≥ 6 missed trips	≥ 3 missed trips
July 2013	17	24	28
August 2013	11	22	26
September 2013	9	14	21
October 2013	6	17	28
November 2013	7	17	24
December 2013	3	6	22
January 2014	0	4	19
February 2014	5	8	22

First Transit Arcadia has made significant progress in service delivery since July 2013. The number of service miles missed by First Transit Arcadia decreased 77 percent from July to February. However, First Transit Arcadia still continues to miss significantly more service than First Transit Pomona. The tables below summarize missed service at First Transit Arcadia and First Transit Pomona.

Month	First Transit Arcadia			First Transit Pomona		
	Trips with missed service <sup>1</sup>	Missed service miles	Scheduled service miles	Trips with missed service <sup>1</sup>	Missed service miles	Scheduled service miles
July 2013	292	5,520	475,968	7	107	416,211
August 2013	140	2,271	475,968	24	465	416,211
September 2013	181	2,829	451,602	24	478	390,343
October 2013	126	1,916	482,952	24	464	425,854
November 2013	99	1,535	452,829	11	192	389,972
December 2013	86	1,397	474,706	28	432	412,480
January 2014	88	1,292	481,778	19	255	434,742
February 2014	96	1,280	428,995	24	426	394,297

<sup>1</sup>Trips on which any portion of scheduled service was missed.



Service miles missed by First Transit Arcadia				
Month	Cause			Monthly total
	Operator issues	Mechanical issues	Other <sup>1</sup>	
July 2013	3,903	1,417	200	5,520
August 2013	322	1,822	127	2,271
September 2013	975	1,638	216	2,829
October 2013	109	1,672	134	1,916
November 2013	149	1,361	25	1,535
December 2013	47	1,247	103	1,397
January 2014	60	1,020	212	1,292
February 2014	77	1,020	182	1,280

<sup>1</sup>Includes accidents, emergencies, passenger disruptions, and traffic.

Overall, First Transit has reduced operator-related causes of missed service, such as lack of available operators. In February 2014, First Transit had an average of 240 operators available for duty, a four percent improvement from July 2013.

The majority of service missed by the contractor continues to be due to breakdowns, even as the older 1100-series buses (model year 2000) have been retired from service. Eighty percent of service missed by First Transit Arcadia in February was related to mechanical problems. The 1400- (model year 2004) and 1600- (model year 2006) series buses accounted for a majority of miles missed due to breakdowns.

### **Roadcalls**

One of Foothill Transit's customer service goals is to provide service with an average of at least 15,000 miles between service interruptions caused by mechanical problems ("roadcalls"). To ensure that consistent progress is made towards this goal, in November 2013 staff established the following timeline of performance targets to be achieved by First Transit Arcadia.

Fleet Maintenance Performance Standard	Target Date	Met?
Minimum of 10,000 miles between mechanical service interruptions	December 31, 2013	Yes
Minimum of 12,500 miles between mechanical service interruptions	January 31, 2014	Yes
Minimum of 15,000 miles between mechanical service interruptions	February 28, 2014	Yes

In February 2014, First Transit Arcadia averaged 15,554 miles between roadcalls, meeting the monthly performance target. This also meets Foothill Transit's overall target of 15,000 miles between roadcalls. However, First Transit Arcadia's 12-month average (11,558 miles) remains short of the overall target.





Month	Arcadia Performance	System Performance
January 2013	8,488	12,017
February 2013	14,461	16,101
March 2013	13,715	15,833
April 2013	9,106	12,879
May 2013	9,011	12,017
June 2013	8,327	12,038
July 2013	8,543	12,161
August 2013	12,281	15,941
September 2013	12,128	16,780
October 2013	9,219	14,023
November 2013	12,154	16,586
December 2013	13,003	17,611
January 2014	15,655	18,964
February 2014	15,554	20,543
<b>12-Month Average</b>	<b>11,558</b>	<b>15,448</b>

Maintaining technician staffing levels has been a challenge for First Transit Arcadia. When First Transit began operations at the Arcadia facility, mechanics employed by the previous Arcadia contractor were hired with the provision that they each obtain Automotive Service Excellence (ASE) certification by June 30, 2013 – a period of one year from their hire date. Out of 29 technicians, 14 (50 percent) did not meet this deadline. Since June, First Transit has recruited 22 new technicians to fill those positions for a total of 36 technicians currently employed.

### **Schedule Adherence**

The Foothill Transit SMART*Bus* System (SBS) monitors schedule adherence by collecting time and location data at every timepoint a bus passes. The SMART*Bus* system provides a framework for identifying and addressing schedule adherence issues, even as work continues on improving the data collection process. The numbers contained in this report have been analyzed for reliability and adjusted to address issues with the SBS.

Foothill Transit's system goal for schedule adherence is for buses to arrive on schedule at 90 percent or more of all timepoints. To help achieve this customer service goal, in November 2013 staff set the following schedule adherence performance standards for First Transit Arcadia:

Schedule Adherence Performance Standard	Target Date	Met?
75% average monthly on-time performance on all lines operated	December 31, 2013	Yes
80% average monthly on-time performance on all lines operated	January 31, 2014	Yes
85% average monthly on-time performance on all lines operated	February 28, 2014	No



In February 2014, First Transit Arcadia did not meet the schedule adherence target, averaging 79 percent on-time performance on all lines operated. Only three lines met the 85 percent schedule adherence benchmark, as shown in the table below. Cells shaded in green indicate that the schedule adherence performance met the monthly target.

Schedule adherence on lines operated by First Transit Arcadia				
Line	November 2013	December 2013	January 2014	February 2014
178	68.5%	76.6%	81.0%	79.4%
185	73.2%	73.0%	75.4%	71.7%
187	74.2%	79.2%	77.9%	77.2%
269	75.1%	80.1%	82.5%	80.4%
272	76.5%	78.6%	80.8%	79.4%
274	87.8%	92.3%	93.0%	90.8%
280	75.6%	82.6%	84.1%	83.1%
281	76.5%	84.0%	85.5%	83.2%
284	86.7%	81.2%	84.6%	86.2%
480	70.7%	77.0%	77.5%	76.3%
494	64.8%	63.5%	70.6%	75.2%
851	84.7%	69.6%	71.8%	69.3%
<b>Local subtotal</b>	<b>74.6%</b>	<b>79.4%</b>	<b>80.7%</b>	<b>79.3%</b>
481	74.6%	74.9%	75.6%	72.9%
690	92.5%	93.3%	95.1%	94.4%
Silver Streak	74.5%	78.2%	82.4%	79.7%
<b>Local Express subtotal</b>	<b>75.2%</b>	<b>78.5%</b>	<b>82.4%</b>	<b>79.8%</b>
<b>Total</b>	<b>74.8%</b>	<b>79.2%</b>	<b>81.0%</b>	<b>79.4%</b>

From November to February, overall on-time performance on lines operated by First Transit Arcadia improved 6 percent. In late November 2013, the agency implemented a schedule change that adjusted running times to better reflect current traffic conditions.

### Customer Comments

Another indicator of the level of customer service provided is the number of complaints received per 100,000 boardings. Foothill Transit's performance target for the current fiscal year is 10.25 complaints per 100,000 boardings. Foothill Transit's management team monitors customer comments received via telephone, email, mail, social media, and in person.



In February 2014, First Transit Arcadia received 13.24 complaints per 100,000 boardings. While this is an improvement over June 2013, First Transit Arcadia has received more complaints than First Transit Pomona in ten out of the last 12 months. The Arcadia facility's 12-month average complaint rate is 23 percent higher than that at Pomona. The chart below shows the number of complaints received per 100,000 boardings by First Transit Arcadia compared to complaints received by First Transit Pomona and system-wide.

Month	Arcadia Performance	Pomona Performance	System Performance
March 2013	6.98	7.64	7.68
April 2013	10.19	5.74	8.28
May 2013	11.23	8.67	10.08
June 2013	23.61	14.85	19.52
July 2013	20.22	11.43	16.35
August 2013	17.89	20.92	19.65
September 2013	21.26	15.80	18.76
October 2013	15.57	13.88	14.80
November 2013	18.71	16.69	17.89
December 2013	16.82	15.55	16.44
January 2014	12.87	9.03	11.15
February 2014	13.24	13.12	13.10
<b>12-Month Average</b>	<b>15.72</b>	<b>12.78</b>	<b>14.48</b>

The majority of complaints continue to be regarding schedule adherence (49 percent) and courtesy (34 percent). In February, Line 187 received the highest number of complaints (nine percent of all complaints), followed by the Silver Streak and Line 495 (eight percent each). First Transit Arcadia operates Line 187 and the Silver Streak; First Transit Pomona began operating Line 495 in February 2014. Lines 187 and the Silver Streak received the most complaints regarding operator courtesy (12 percent of all courtesy complaints). Line 495 received the most schedule adherence complaints (15 percent of all schedule adherence complaints).

#### Next steps

Staff will continue to monitor and report to the Executive Board on the maintenance and operations service provided by First Transit Arcadia.





**Foothill Transit**

## **Executive Board Meeting**

Special Executive Board Meeting – 03/21/14  
Foothill Transit Arcadia Facility Service and Maintenance Review  
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### **Budget Impact**

This is a status update item only. There is no budget impact.

Sincerely,

A blue ink signature of LaShawn King Gillespie, written in a cursive style.

LaShawn King Gillespie  
Director of Customer Service and Operations

A blue ink signature of Doran J. Barnes, written in a cursive style.

Doran J. Barnes  
Executive Director